

UDC: 378.1.30

**FORMS AND METHODS OF DEVELOPING STUDENTS TO SCIENTIFIC
CREATIVITY, THEIR SIGNIFICANCE**

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Abstract: In recent years, such participation of students in research work has ceased to meet the requirements for higher education in the country from the side of rapidly developing science, technology, and production. An objective need arose for all future specialists in the learning process to go through the school of scientific and technical creativity, since the very nature of a specialist's work, regardless of where the specialist works, is increasingly becoming creative and requires appropriate training.

Key words: Training, creative, technology, science, knowledge, modern, educational environment.

The problems put forward by modern production and practices are so complex that their solution often requires creative search and research skills. In this regard, a modern specialist must possess not only the necessary amount of fundamental and special knowledge, but also certain skills of creative solution of practical issues, the ability to use in his' work everything new that appears in science and practice, constantly improve his qualifications, quickly adapt to production conditions. All these qualities must be brought up at the university. And they are brought up through the active participation of students in research activities.

The main task of universities in modern conditions is to train well-rounded specialists capable of continuously replenishing and deepening their knowledge, raising the ideological, theoretical and professional level, actively participating in the acceleration of scientific and technological progress. For these purposes,

universities are constantly taking measures aimed at increasing the efficiency of the educational process and research work through the integration of science, education and production, prompt and flexible updating of the content, educational material. Particular attention is paid to the development of the creative abilities of future specialists through the introduction of active forms of education, designed to form students' independence and creative activity, a responsible approach to mastering knowledge. Research work carried out by the teaching staff is becoming increasingly important in improving the quality of training a specialist who meets the requirements of science, technology and culture. It has a triune goal: solving urgent scientific and national economic problems, improving the quality of training future specialists and improving the qualifications of teachers. The development of research work in higher educational institutions has created conditions for the widespread involvement of students in scientific research - an important factor in improving the quality of training in accordance with the modern requirements of the scientific and technological revolution.

The experience of modern universities shows that under the conditions of the scientific and technological revolution, student research work has turned from a means of developing the creative abilities of the most successful and gifted students into a powerful lever for improving the quality of training of all specialists with higher education and is an important method of communist education. allows you to direct the scientific and labor potential of students to solve major national economic problems.

The modern concept of "students' research work" includes two interrelated elements: teaching students the elements of research work, instilling in them the skills of this work; actually scientific research conducted by students under the guidance of professors and teachers.

The main tasks of the councils are to provide comprehensive assistance to the leadership of the university and trade union organizations in creating conditions for wide participation of students in research, design and creative work, dissemination of positive experience in organizing students' scientific work;

rendering assistance to the national economy in solving urgent scientific problems by the efforts of students; methodological guidance of the work of subordinate councils for the scientific work of students, the organization of student scientific and technical conferences, exhibitions, competitions, reviews, etc.

The forms and methods of attracting students to scientific creativity are conditionally subdivided into research work included in the educational process and, therefore, carried out during school hours in accordance with curricula, educational and research work (ERW), as well as research work performed by students outside of school hours. Educational research work (ERW) is carried out in the time allocated for the schedule of lessons on a special assignment by each student under the guidance of a teacher - scientific supervisor. frames and equipment, independently conduct experiments, apply their knowledge in solving specific scientific problems.

To carry out educational and research work, students receive a workplace in the laboratory, the necessary instruments and materials. They are subject to the rules of labor discipline and the daily routine of laboratories and other scientific departments. The topic of work and the scope of the assignment are determined individually. The department, which includes ERW in its curriculum, preliminarily develops research topics, provides it with supervisors, educational personnel, prepares methodological documentation, recommendations for the study of special literature.

The main staff of ERW leaders are teachers who are actively involved in scientific work, as well as researchers, engineers and graduate students.

The ERW ends with the preparation of a report in which students set out the results of their scientific activities and present it for defense before a special commission.

A promising direction is the creation of educational and scientific laboratories in higher educational institutions, in which scientific research is carried out and at the same time educational and research work of students is organized. For junior courses, one of the forms of research work in the framework of the educational process is the preparation of abstracts.

The research work of students during the period of practical training is often associated with the implementation of specific tasks in production on the topic of research work carried out by the department, or with the analysis of “bottlenecks” in production, with the implementation of tasks of improving technological processes, equipment, scientific organization of labor, and also with the collection of factual material, its primary processing for use in coursework and diploma design.

The scientific work of students, carried out outside of school hours, is organized in the form of students’ participation in the implementation of research on the topic of planned economic contractual and state budget research work of departments and scientific institutions of universities; organization of student scientific circles; student bureaus and associations such as SRW (design, technological, economic and other bureaus, research centers, research institutes, research and production teams), assistance to practical health care, sponsorship at school; lectures on the dissemination of knowledge in the field of science, technology, culture, etc.

Student scientific circles at a department or scientific laboratory are relatively small groups united by the development of a specific scientific problem. Each student in the circle performs an independent task of the supervisor. The main form of students’ scientific work, carried out outside the classroom, is the participation of students in scientific research conducted by departments and scientific institutions of the university on state budgetary and contractual topics. In this case, students, as a rule, are entrusted with the development of a specific scientific and technical problem arising from the topic being performed.

Usually, a group participating in the development of a scientific topic includes several students, often of different courses, which allows to ensure the continuity, continuity and clear organization of their work. Senior students are registered as laboratory assistants, technicians with payment. At the same time, work books are drawn up for students and appropriate entries are made in it. The work is carried out according to the schedule approved by the supervisor and the

department. Students' work is supervised by teachers, researchers, engineers and graduate students working in the group. In universities, it is increasingly firmly established that the order in which the number of students on each topic, and the salary fund to pay for their labor, are planned in advance when the plan for the development of the topic is approved.

Students who have successfully completed the task in their section are included in the list of authors of the report as performers.

The basis for the implementation of such an integrated system of organizing research work in the university is "An approximate standard comprehensive plan for organizing students' research work for the entire period of study."

On the basis of the model plan, each university develops its own specific comprehensive plan for organizing research work for the entire period of study, taking into account the profile, scientific traditions and the level of development of research work in this higher educational institution, as well as plans for specialties.

Specialty plans are developed by the departments of social sciences, general scientific, general technical and graduate departments that train specialists in a specific specialty.

Literature:

1. Kiryigitov B., Nosirova M. Introduction & Purpose of the project: software facilities in translation. International conference., 2016, p.268.
2. Mukhitdinova F.R. Creative qualities of the students in the system of higher education. //Economy And Society. № 11(78) -S.: 2020.
3. Nuriddinova Yo. The assistant Learner motivation and interest in language learning. International conference., 2016, p.436.
4. Usmonova Sh. Study of scientific technical transfusion in non-linguistic educational university. International journal. Moscow.2019.